

Appl. No. 10/694,464
Amendment dated June 7, 2007
Reply to Office Action of February 7, 2007

Remarks/Arguments

Claims 1-29 are pending and of these: claims 1-4, 8-10, 19-22 and 26-29 stand rejected on varying grounds under §103(a); claims 5-7 and 23-25 are objected to but deemed to recite allowable subject matter; and claims 11-18 are allowed.

Claims 1 and 19 have been amended and claim 2 has been canceled. Claim 3 has been amended to resolve an antecedent issue due to the amendment to claim 1. No new matter has been added by any amendment.

In view of the comments below, Applicant respectfully requests that the Examiner reconsider the present application including claims 1, 3-10 and 19-29 and withdraw the rejection of or objection to these claims.

a) Applicant notes with appreciation that the drawings originally filed have been reviewed and accepted.

b) Claims 1-4, 9-10, 19-22 and 27-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sahai, et al. (U.S. Patent No. 7,027,534 B2).

Claims 1 and 19 are in independent form with the other cited claims dependent on the closest lower numbered one of claim 1 or claim 19. Claims 1 and 19 have been amended and claim 2 has been canceled as indicated in the listing of claims and other comments above.

Specifically claim 1 has been amended to recite that the processing relies on known properties between predesignated symbols of the received signal (see page 12, first paragraph among others).

Appl. No. 10/694,464
Amendment dated June 7, 2007
Reply to Office Action of February 7, 2007

In Sahai et al. conventional I and Q correlation techniques evaluated with different time shifts of a received signal and used to select an appropriate delay (col. 3, lines 47-60).

The Examiner concedes that Sahai et al does not show processing the signal sample to suppress on channel interference and provide a processed sample. However the Examiner alleges "...because the IQ correlations are standard In-phase and Quadrature correlations of the sampled signal with a suitably modulated reference signal representing the known signal, one of ordinary skill in the art at the time the invention was made would have recognized the correlation computation suppress in- band channel interference."

Applicant respectfully disagrees noting that as is known correlation is essentially an averaging process and thus only reduces the impact of signals with a zero mean, e.g., noise signals. Claim 1 requires suppression of on channel interference relying on known properties between predesignated symbols of the received signal.

Applicant respectfully submits that Sahai et al does not show or suggest suppression of on channel interference or doing so with reliance on known properties between predesignated symbols and thus does not anticipate all features of claim 1 or any claims dependent thereon.

Claim 19 as amended recites (among other features) "process the signal sample to suppress on channel interference relying on a known structure of the on channel interference, the on channel interference caused by at least one of a co-channel signal and an adjacent channel signal and provide a processed sample;"

Applicant respectfully submits that Sahai et al does not show or suggest suppression of on channel interference or further relying on a known structure of the on channel interference or further suppression of such interference caused either by a co-channel signal or an adjacent

Appl. No. 10/694,464
Amendment dated June 7, 2007
Reply to Office Action of February 7, 2007

channel signal and thus, does not anticipate all features of claim 19 or any claims dependent thereon.

Therefore and in view of the above comments, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 1, 3-4, 9-10, 19-22 and 27-29 under 35 U.S.C. 103(a) as being unpatentable over Sahai, et al. (U.S. Patent No. 7,027,534 B2).

c) Claims 8 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sahai, et al. (U.S. Patent No. 7,027,534 B2) as applied to claim 1 above, and further in view of Gordon, et al. (U.S. Patent No. 6,567,486 B1).

Claim 8 is dependent on claim 1 and claim 26 is dependent on claim 19. As noted above these claims, as amended, are believed to be allowable over Sahai et al. Gordon et al taken alone or together with Sahai et al. does not show or suggest all features of either claim 1 or claim 19 and thus, at least by virtue of dependency, claim 8 and claim 26 should be allowable over this combination of references.

Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claim 8 and claim 26 under 35 U.S.C. 103(a) as being unpatentable over Sahai, et al. (U.S. Patent No. 7,027,534 B2) as applied to claim 1 above, and further in view of Gordon, et al. (U.S. Patent No. 6,567,486 B1).

d) Claims 5-7 and 23-25 are objected to as being dependent upon a rejected base claim.

Applicant agrees that these claims recite allowable subject matter. From the above discussions, it is believed that independent claim 1 and claim 19 are allowable over all cited references and thus these claims should also be allowable. Hence, Applicant respectfully submits

Appl. No. 10/694,464
Amendment dated June 7, 2007
Reply to Office Action of February 7, 2007

that the objection to these claims has been successfully overcome and respectfully requests that the Examiner reconsider and withdraw the rejection.

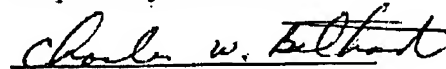
e) Claims 11-18 are allowed.

Applicant agrees that these claims are allowable over all references of record.

Accordingly, Applicant respectfully submits that the pending claims, as amended, clearly and patentably distinguish over the cited reference of record and as such are to be deemed allowable. Such allowance is hereby earnestly and respectfully solicited at an early date. If the Examiner has any suggestions or comments or questions, calls are welcomed at the phone number below.

Although it is not anticipated that any fees are due or payable other than the separately noted one month extension fee, the Commissioner is hereby authorized to charge any fees that may be required or credit any overpayments to Deposit Account No. 50-3435.

Respectfully submitted,



Charles W. Bethards
Reg. No. 36,453

Law Office of Charles W. Bethards, LLP
P.O. Box 1622
Colleyville, Texas 76034
Phone (817) 581-7005
Fax (817) 281-7136
Customer No. 51874